

WHAT IS CLAIMED IS:

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2       1. A printer comprising:  
3                 an input tray including an input print media support surface;

4       and

5                 an output tray including an output print media support  
6       surface; wherein

7                 at least one of the trays form part of an exterior side of the  
8       printer substantially contoured with a housing of the printer when the  
9       trays are in a closed position, and wherein the print media support surface  
10      of one of the trays is positioned outboard of the print media support  
11      surface of the other tray when the input tray and the output tray are in  
12      the closed position; wherein

13                 the input tray is configured to prevent input print media in the input  
14      tray that has not been circulated through the printer from contacting  
15      output print media in the output tray that has been circulated through the  
16      printer; and wherein

17                 the output tray is configured to prevent output print media in the  
18      output tray that has been circulated through the printer from contacting  
19      input print media in the input tray that has not been circulated through the  
20      printer.

21

22       2. The printer of claim 1, wherein the input tray and the output  
23      tray are rotatable from the closed position to a open position and from the  
24      open position to the closed position.

25

26       3. The printer of claim 2, wherein the input tray forms part of  
27      an exterior side of the printer substantially contoured with a housing of  
28      the printer when the trays are in a closed position, and wherein the input

29 print media support surface of the input tray is positioned outboard of the  
30 output print media support surface of the output tray when the input tray  
31 and the output tray are in the closed position.

32

33 4. The printer of claim 3, wherein the input print media support  
34 surface of the input tray is positioned below the output tray when the  
35 input tray and the output tray are in a open position.

36

37 5. The printer of claim 3, wherein the output tray sits about  
38 20 mm above the input tray when both trays are in the open position.

39

40 6. The printer of claim 3, wherein the input tray is of one-piece  
41 configuration.

42

43 7. The printer of claim 3, wherein the input tray comprises a  
44 slotted gusset on at least one side of the input tray, the gusset extending  
45 on a plane normal to an axis of rotation of the input tray, and wherein a  
46 rotation boss of the output tray extends through a slot in the slotted  
47 gusset.

48

49 8. The printer of claim 3, wherein the input tray comprises  
50 slotted gussets on two sides of the input tray, the slotted gussets  
51 extending on a plane normal to an axis of rotation of the input tray, and  
52 wherein rotation bosses of the output tray extends through a slot in each  
53 of the gussets.

54

55 9. The printer of claim 7, wherein an end of the slot of the  
56 slotted gusset contacts the rotation boss of the output tray when the

57       input tray is rotated to the open position to limit the rotation of the input  
58       tray.

59

60           10. The printer of claim 9, wherein an end of the slot of the  
61       slotted gusset contacts the rotation boss of the output tray when the  
62       input tray is rotated to the open position to define the angle of the input  
63       tray when the input tray is at the open position.

64

65           11. The printer of claim 7, wherein the slotted gusset has a  
66       detent rib extending from the slotted gusset to lock the input tray in the  
67       closed position.

68

69           12. The printer of claim 11, wherein the detent rib of the slotted  
70       gusset interferes with a rib on the housing when the input tray is rotated  
71       in the direction of the open position from the closed position, the  
72       interference being a result of elastic deformation in at least one of the  
73       slotted gusset and a portion of the printer housing that supports the rib on  
74       the printer housing.

75

76           13. The printer of claim 12, wherein the detent rib does not  
77       interfere with the rib on the housing when the input tray is in the closed  
78       position and when the input tray is in the open position.

79

80           14. The printer of claim 11, wherein the housing includes a guide  
81       component that interferes with the slotted gusset when the input tray is  
82       rotated in the direction of the closed position from the open position to  
83       elastically deform the slotted gusset so that the detent rib is pushed  
84       behind the rib on the housing to lock the input tray in the closed position.

85

86        15. The printer of claim 3, wherein the input tray includes a  
87 rotation stop that contacts the output tray when the input tray is in the  
88 open position to limit the rotation of the output tray.

89

90        16. The printer of claim 15, wherein the rotation stop defines the  
91 angle of the output tray in the open position when the input tray is in the  
92 open position.

93

94        17. The printer of claim 16, wherein the angle of the output tray  
95 when the output tray is in the open position is defined by the angle of the  
96 input tray when the input tray is in the open position.

97

98        18. The printer of claim 15, wherein the rotation stop contacts a  
99 rotation stop surface on the output tray, and wherein rotation of the input  
100 tray and the output tray from the open position causes the rotation stop  
101 to be positioned in an area below the stop surface.

102

103        19. The printer of claim 3, wherein the output tray includes an  
104 output media stop that is extendable and retractable.

105

106        20. The printer of claim 3, wherein the output tray nests inside  
107 the input tray when the input tray is in the closed position.

108

109        21. The printer of claim 3, wherein a substantial portion of the  
110 output tray nests inside the input tray when the input tray is in the closed  
111 position.

112

113        22. The printer of claim 3, wherein the input tray and the output  
114 tray elastically deform to permit rotation bosses on the input tray and the  
115 output tray to snap into respective receptacles of the printer housing.

116

117        23. The printer of claim 19, wherein the output media stop  
118 hingedly rotates to be flush with or below the output print media support  
119 surface of the output tray.

120

121        24. A printer, comprising:

122              an input tray including a input print media support surface;  
123 and

124              an output tray including an output print media support  
125 surface separate from the input print media support surface of the input  
126 tray; wherein

127              the output tray nests in the input tray or the input tray nests  
128 in the output tray when the input tray and the output tray are in the  
129 closed position; and wherein

130              the input tray is configured to prevent input print media in the input  
131 tray that has not been circulated through the printer from contacting  
132 output print media in the output tray that has been circulated through the  
133 printer.

134

135        25. The printer of claim 24, wherein the output tray nests in the  
136 input tray when the input tray and the output tray are in a closed position.

137

138        26. The printer of claim 25, wherein a portion of the output tray  
139 extends past a plane formed by the input print media support surface of  
140 the input tray when the output tray nests in the input tray.

141

142        27. The printer of claim 25, wherein the input tray comprises  
143 support walls extending from the input print media support surface of the  
144 input tray along the sides of the input tray, and wherein a substantial  
145 portion of the output print media support surface of the output tray lies  
146 inside an extrapolated volume formed by the input print media support  
147 surface of the input tray and the support walls of the input tray.

148

149        28. The printer of claim 25, wherein the support walls of the  
150 input tray substantially extend past sides of the output tray when the  
151 input tray and the output tray are in a closed position.

152

153        29. The printer of claim 24, wherein the output tray nests in the  
154 input tray when the input tray and the output tray are in a closed position,  
155 and wherein the input tray and the output tray are rotatable from the  
156 open position to the closed position.

157

158        30. The printer of claim 29, wherein a thickness of the input tray  
159 and the output tray is about the same as the thickness of the input tray  
160 when the output tray nests in the input tray.

161

162        31. The printer of claim 29, wherein the input print media  
163 support surface of the input tray is positioned below the output tray when  
164 the input tray and the output tray are in a open position.

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166        32. The printer of claim 29, wherein the output tray sits about  
167 20 mm above the input tray.

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169        33. The printer of claim 29, wherein the input tray is of one-  
170 piece configuration.

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172       34. The printer of claim 33, wherein the input tray comprises a  
173 slotted gusset on at least one side of the input tray, the slotted gusset  
174 extending on a plane normal to an axis of rotation of the input tray, and  
175 wherein a rotation boss of the output tray extends through a slot in the  
176 slotted gusset.

177

178       35. The printer of claim 29, wherein the input tray comprises  
179 slotted gussets located on two sides of the input tray, the slotted gussets  
180 extending on a plane normal to an axis of rotation of the input tray and  
181 wherein rotation bosses of the output tray extends through a slot in each  
182 of the slotted gussets.

183

184       36. The printer of claim 35, wherein an end of the slot of the  
185 slotted gusset contacts the rotation boss of the output tray when the  
186 input tray is rotated to the open position to limit the rotation of the input  
187 tray.

188

189       37. The printer of claim 36, wherein an end of the slot of the  
190 slotted gusset contacts the rotation boss of the output tray when the  
191 input tray is rotated to the open position to define the angle of the input  
192 tray when the input tray is at the open position.

193

194       38. The printer of claim 34, wherein the slotted gusset has a  
195 detent rib extending from the slotted gusset to lock the input tray in the  
196 closed position.

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198       39. The printer of claim 38, wherein the detent rib of the slotted  
199 gusset interferes with a rib on a housing when the input tray is rotated in

200 the direction of the open position from the closed position, the  
201 interference being a result of elastic deformation in at least one of the  
202 slotted gusset and a portion of the printer housing that supports the rib on  
203 the printer housing.

204

205 40. The printer of claim 39, wherein the detent rib does not  
206 interfere with the rib on the housing when the input tray is in the closed  
207 position and when the input tray is in the open position.

208

209 41. The printer of claim 38, wherein the housing includes a guide  
210 component that interferes with the gusset when the input tray is rotated  
211 in the direction of the closed position from the open position to elastically  
212 deform the slotted gusset so that the detent rib is pushed behind the rib  
213 on the housing to lock the input tray in the closed position.

214

215 42. The printer of claim 29, wherein the input tray includes a  
216 rotation stop that contacts the output tray when the input tray is in the  
217 open position to limit the rotation of the output tray.

218

219 43. The printer of claim 42, wherein the rotation stop defines the  
220 angle of the output tray when the input tray is in the open position.

221

222 44. The printer of claim 43, wherein the angle of the output tray  
223 when the output tray is in the open position is defined by the angle of the  
224 input tray when the input tray is in the open position.

225

226 45. The printer of claim 42, wherein the rotation stop contacts a  
227 rotation stop surface on the output tray, and wherein rotation of the input

228 tray and the output tray from the open position causes the rotation stop  
229 to be positioned in an area below the stop surface.

230

231       46. The printer of claim 29, wherein the output tray includes a  
232 tray extension that is extendable and retractable.

233

234       47. The printer of claim 46, wherein the tray extension rotates  
235 from a stowed position in the output tray to an in-use position.

236

237       48. The printer of claim 46, wherein the tray extension  
238 telescopes outward from under the print media support surface of the  
239 output tray to an in-use position.

240

241       49. The printer of claim 29, wherein the input tray and the  
242 output tray elastically deform to permit rotation bosses on the input tray  
243 and the output tray to snap into respective receptacles of a printer  
244 housing.

245

246       50. The printer of claim 29, wherein the input tray forms part of  
247 an exterior side of the printer substantially contoured with a housing of  
248 the printer.

249

250       51. The printer of claim 26, wherein the output tray is a output  
251 tray.

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253       52      The printer of claim 25, wherein the printer has Print, Fax,  
254 Scan, and Copy capability.

255

256

257        53. The printer of claim 1, wherein the input tray is rotatable  
258 about a first axis of rotation from the closed position to the open position  
259 and from the open position to the closed position, and wherein the output  
260 tray is rotatable about a second axis of rotation from the closed position  
261 to the open position and from the open position to the closed position.

262

263        54. The printer of claim 1, wherein the first axis of rotation is  
264 separate from the second axis of rotation.

265

266        55. A printer, comprising:  
267              a means for supporting input print media; and  
268              a means for supporting output print media; wherein  
269              the means for supporting input print media has a surface that  
270              is substantially contoured with an exterior surface of a printer housing.

271

272        56. The printer of claim 55, wherein the means for supporting  
273 input print media and the means for supporting output print media are  
274 rotatable about distinct axes between open and closed positions.

275

276        57. A printer, comprising:  
277              a means for supporting input print media; and  
278              a means for supporting output print media; wherein  
279              one of the means for supporting input print media and the  
280              means for supporting output print media nests within the other when in  
281              the closed position.

282

283        58. The printer of claim 57, wherein the means for supporting  
284 input print media and the means for supporting output print media are  
285 rotatable about distinct axes between open and closed positions.